













VOLTAGE: 120/240 VAC, 1-PHASE, 3-WIRE PANEL TAG: PNL 156 MAINS: LUG[] C.B. [X] AMPS: 100 MOUNTING: SURFACE, NEMA 3R FEED THRU LUG [ ] FEEDER: SEE RISER PANEL TYPE: LIGHTING & APPLIANCE MIN A.I.C.: DIST O/C PROT KVA P KVA PROT ITEM OR AREA SERVED

20/1 0.0 A 0.0 20/1 GARAGE 358 LTG

15/1 0.0 C 0.0 20/1 GARAGE 358 RECEPT

20/1 0.0 A 0.0 20/1 GARAGE 359 LTG ITEM OR AREA SERVED 1 STREET LIGHTING 3 STREET LIGHTING 5 SPARE | 20/1 | 0.0 | C | 0.0 | 20/1 | GARAGE 359 RECEPT | 20/1 | 0.0 | A | 0.0 | SPACE | | 0.0 | C | 0.0 | SPACE | | 0.0 | A | 0.0 | SPACE | | 0.0 | A | 0.0 | SPACE | 11 SPACE 13 SPACE 15 SPACE 17 SPACE 
 0.0
 C
 0.0
 SPACE

 0.0
 A
 0.0
 SPACE
 TOTAL CONNECTED LOAD (KVA) 0.0 TOTAL DEMAND LOAD (KVA) FEEDER AMPERES DEMAND 0.0

	L TAG: PNL 176			VOLTAGE: 120/240 VAC, 1-PHASE, 3-WIRE							
MOUN	NTING: SURFACE, NEMA 3R			MAINS: LUG[] C.B. [X] AMPS: 225							
FEEDER: SEE RISER						FEED THRU LUG [ ]					
PANEL TYPE: LIGHTING & APPLIANCE					MIN A.I.	.C.:	22,000	(A)			
		O/C	DIST		DIST	O/C					
CKT	ITEM OR AREA SERVED	PROT	KVA	Р	KVA	PROT	ITEM OR AREA SERVED	CKT			
1	GARAGE 121	30/2	0.0	Α	0.0	50/2	BLDG 48	2			
3	GARAGE 121	30/2	0.0	С	0.0	30/2	BLDG 40	4			
5	SPACE		0.0	Α	0.0		SPACE	(			
7	SPACE		0.0	С	0.0		SPACE	;			
9	SPACE		0.0	Α	0.0		SPACE	1			
11	SPACE		0.0	С	0.0		SPACE	1:			
13	SPACE		0.0	Α	0.0		SPACE	14			
15	SPACE		0.0	С	0.0		SPACE	10			
17	SPACE		0.0	Α	0.0		SPACE	18			
19	SPACE		0.0	С	0.0		SPACE	20			
21	SPACE		0.0	Α	0.0		SPACE	2:			
23	SPACE		0.0	С	0.0		SPACE	24			
25	SPACE		0.0	Α	0.0		SPACE	20			
27	SPACE		0.0	С	0.0	200/2	PANEL 50A, NOTE 1	28			
29	SPACE		0.0	Α	0.0	200/2	PANEL SUA, NOTE I	30			
				•		•		•			
	TOTAL CONNECTED LOAD (KVA)		0.0								
	· ,						NOTES:				
	TOTAL DEMAND LOAD (KVA)		0.0				1. CHANGE BREAKER TO 125A				

FEEDER AMPERES DEMAND

PANEL TAG: BLDG 96

MOUNTING: SURFACE

FEEDER AMPERES DEMAND

FEEDER: SEE RISER

FEEDER: SEE RISER						FEED THRU LUG [ ]				
PANEL TYPE: LIGHTING & APPLIANCE					MIN A.I.C.:		10,000			
		O/C	DIST		DIST	O/C				
CKT	ITEM OR AREA SERVED	PROT	KVA	Р	KVA	PROT	ITEM OR AREA SERVED	C		
1	EXISTING	30/2	0.0	Α	0.0	20/2	EVICTING			
3	EXISTING	30/2	0.0	С	0.0	20/2	EXISTING			
5	EXISTING	15/1	0.0	Α	0.0	20/1	SPARE			
7	EXISTING	15/1	0.0	С	0.0	20/1	SPARE			
9	EXISTING	15/1	0.0	Α	0.0	20/1	SPARE			
11	EXISTING	15/1	0.0	С	0.0		SPACE			
13	EXISTING	15/1	0.0	Α	0.0		SPACE			
15	EXISTING	15/1	0.0	С	0.0		SPACE			
17	SPACE		0.0	Α	0.0		SPACE			
19	SPACE		0.0	С	0.0		SPACE			
21	SPACE		0.0	Α	0.0		SPACE			
23	SPACE		0.0	С	0.0		SPACE			
25	SPACE		0.0	Α	0.0		SPACE			
27	SPACE		0.0	С	0.0	E0/0	DANEL FOR			
29	SPACE		0.0	Α	0.0	50/2	PANEL 50B			

1. PANEL BREAKER TO 125A

IN DEDUCT ALTERNATE #2.

TOTAL DEMAND LOAD (KVA)

FEEDER AMPERES DEMAND

PANEL TAG: PNL 50B					VOLTA	OLTAGE: 120/240 VAC, 1-PHASE, 3-WIRE			
MOUI	NTING: FLUSH	MAINS: LUG[] C.B. [X] AMPS: 50							
FEED	ER: SEE RISER	FEED THRU LUG [ ]							
PANE	L TYPE: LIGHTING & APPLIANCE				MIN A.I.C.:		10,000	(A)	
		O/C	DIST		DIST	O/C			
СКТ	ITEM OR AREA SERVED	PROT	KVA	Р	KVA	PROT	ITEM OR AREA SERVED	СКТ	
1	EXISTING	20/1	0.0	Α	0.0	20/1	SPARE	2	
3	EXISTING	20/1	0.0	С	0.0	20/1	SPARE	4	
5	EXISTING	20/1	0.0	Α	0.0	20/1	SPARE	6	
7	EXISTING	20/1	0.0	С	0.0		SPACE	8	
9	SPACE		0.0	Α	0.0		SPACE	10	
11	SPACE		0.0	С	0.0		SPACE	12	
13	SPACE		0.0	Α	0.0		SPACE	14	
15	SPACE		0.0	С	0.0		SPACE	16	
17	SPACE		0.0	Α	0.0		SPACE	18	
19	SPACE		0.0	С	0.0		SPACE	20	
	TOTAL CONNECTED LOAD (KVA)		0.0						
	TOTAL DEMAND LOAD (KVA)		0.0				NOTE: DEDUCT ALTERNATE #2		
	FEEDER AMPERES DEMAND		0.0				ELIMINATES PANEL.		
	FEEDER AMPERES DEMAND		0.0						

		CIRCUIT SCHEDULE			
MARK	SERVICE	4-WIRE	3-WIRE		
(AMPACITY)	CONDUCTORS	(W/NEUTRAL)	(NO NEUTRAL)		
	PH/N-C	PH/N-GND-C	PH-GND-C		
15	12-3/4"	12-12-3/4"	12-12-3/4"		
20	12-3/4"	12-12-3/4"	12-12-3/4"		
25	10-3/4"	10-10-3/4"	10-10-3/4"		
30	10-3/4"	10-10-3/4"	10-10-3/4"		
35	8-1"	8-10-1"	8-10-3/4"		
40	8-1"	8-10-1"	8-10-3/4"		
45	6-1 1/4"	6-10-1 1/4"	6-10-1"		
50	6-1 1/4"	6-10-1 1/4"	6-10-1"		
60	6-1 1/4"	6-10-1 1/4"	6-10-1"		
70	4-1 1/2"	4-8-1 1/2"	4-8-1 1/4"		
80	3-1 1/2"	3-8-1 1/2"	3-8-1 1/2"		
90	3-1 1/2"	3-8-1 1/2"	3-8-1 1/2"		
100	2-1 1/2"	2-8-1 1/2"	2-8-1 1/2"		
110	2-1 1/2"	2-6-1 1/2"	2-6-1 1/2"		
125	1-2"	1-6-2"	1-6-1 1/2"		
150	1/0-2"	1/0-6-2"	1/0-6-2"		
175	2/0-2"	2/0-6-2"	2/0-6-2"		
200	3/0-2 1/2"	3/0-6-2 1/2"	3/0-6-2"		
225	4/0-2 1/2"	4/0-4-2 1/2"	4/0-4-2 1/2"		
250	250 KCMIL-3"	250 KCMIL-4-3"	250 KCMIL-4-2 1/2"		
300	350 KCMIL-3"	350 KCMIL-4-3"	350 KCMIL-4-3"		
350	500 KCMIL-3 1/2"	500 KCMIL-3-3 1/2"	500 KCMIL-3-3"		
400	600 KCMIL-4"	600 KCMIL-3-4"	600 KCMIL-3-3 1/2"		
400	(2) 3/0-2 1/2"	(2) 3/0-3-2 1/2"	(2) 3/0-3-2"		
450	(2) 4/0-2 1/2"	(2) 4/0-2-2 1/2"	(2) 4/0-2-2 1/2"		
500	(2) 250 KCMIL-3"	(2) 250 KCMIL-2-3"	(2) 250 KCMIL-2-2 1/2"		
600	(2) 350 KCMIL-3"	(2) 350 KCMIL-1-3"	(2) 350 KCMIL-1-3"		

PANEL TYPE: MLO - NOTE 1					MIN A.I.	C.:	10,000	(A)
		O/C	DIST		DIST	O/C		
CKT	ITEM OR AREA SERVED	PROT	KVA	P	KVA	PROT	ITEM OR AREA SERVED	CK <sup>-</sup>
1	EXISTING	20/2	0.0	Α	0.0	20/1	EXISTING	
3	LAISTING	20/2	0.0	В	0.0	20/1	EXISTING	
5	EXISTING	20/1	0.0	С	0.0	20/1	EXISTING	
7	EXISTING	20/1	0.0	Α	0.0	20/1	EXISTING	
9	EXISTING	20/1	0.0	В	0.0	20/1	EXISTING	1
11	EXISTING	20/1	0.0	С	0.0	20/1	EXISTING	1
13	EXISTING	20/1	0.0	Α	0.0	20/1	EXISTING	1
15	EXISTING	20/1	0.0	В	0.0	20/1	EXISTING	1
17	EXISTING	20/1	0.0	С	0.0	20/1	EXISTING	1
19	EXISTING	20/1	0.0	Α	0.0	30/2	EXISTING	2
21	EXISTING	20/1	0.0	В	0.0	30/2	LAISTING	2
23	EXISTING	30/2	0.0	С	0.0	20/1	EXISTING	2
25	EXISTING	30/2	0.0	Α	0.0	20/1	EXISTING	2
27	EXISTING	15/1	0.0	В	0.0		SPACE	2
29	SPACE		0.0	С	0.0		SPACE	3
31	SPACE		0.0	Α	0.0		SPACE	3
33	SPACE		0.0	В	0.0		SPACE	3
35	SPACE		0.0	С	0.0		SPACE	3
37	SPACE		0.0	A	0.0		SPACE	3
39	SPACE		0.0	В	0.0		SPACE	4
41	SPACE		0.0	С	0.0		SPACE	4
	TOTAL CONNECTED LOAD (KVA)		0.0					
	TOTAL DEMAND LOAD (KVA)		0.0				NOTES:	

IN DEDUCT ALTERNATE #2.

VOLTAGE: 208Y/120 VAC, 3-PHASE, 4-WIRE

1. GROUNDING WILL BE AT METER BREAKER.

MAINS: LUG[X] C.B. [] AMPS: 200

FEED THRU LUG [ ]

- 1. ALL CIRCUITS (BRANCH, FEEDERS, AND SERVICE) SHALL BE SIZED PER THE OVERCURRENT DEVICE AND THIS CIRCUIT SCHEDULE UNLESS OTHERWISE NOTED.
- THE ABOVE CHART IS THE MINIMUM CONDUCTOR AND CONDUIT SIZE FOR THE OVERCURRENT DEVICE. CHART DOES NOT INCLUDE REQUIRED VOLTAGE DROP.
- 2. CIRCUITS SHALL BE 4 WIRE (4W) UNLESS DENOTED WITH "3W" (3 WIRE) OR "K" (K RATED), OR IS THE SERVICE ENTRANCE FROM THE UTILITY. 3. ALL BRANCH CIRCUITS AND FEEDERS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR.
- 4. ALL CONDUCTORS SHALL BE COPPER. 5. THE NEUTRAL SHALL BE THE SAME SIZE AS THE PHASE CONDUCTORS UNLESS 3-WIRE, OR NOTED OTHERWISE.
- 6. THE NUMBER OF PARALLEL SETS IS INDICATED IN PARENTHESIS.
- 7. SINGLE PHASE CIRCUITS SHALL BE SIZED PER THE OVERCURRENT DEVICE UNLESS OTHERWISE NOTED. SIZE THE CONDUCTORS AND CONDUIT PER THE 4-WIRE COLUMN OF THIS CHART

CONSULTANTS:

BUT REDUCE THE AMOUNT OF PHASE CONDUCTORS AS REQUIRED.

		ARCHITECT/ENGINEERS:	Drawing Title  ELECTRICAL SCHEDULES	Project Title Primary Voltage Upgrade, Phase 2	Project Number 568-14-101	Office of
	PROFESS/ONAL PEG. NO. 100 PROFESS/ONAL PEG.	TSP, Inc. 1112 N. West Ave.	LLLOTTIICAL SOTILDULLS		Building Number Campus	Construction and Facilities
		Sioux Falls, SD 57104 phone: (605) 336-1160	Approved: Project Director	Location Ft. Meade, South Dakota	Drawing Number	Management
-	DATE: 06/29/2015	fax: (605) 336-7926 www.teamtsp.com To Solve. To Excel. Together.  TSP PROJECT #04151352		Date Checked Drawn CRV	E-602 Dwg. 8 of 8	Department of Veterans Affairs

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